

Table 4-2
Flow Comparison of Concrete Elliptical Pipe and Snap-Tite Liner

Concrete Elliptical Pipe			Equivalent Snap-Tite® Round OD (in.)	Outside Liner Diameter (in.)		Inside Liner Diameter (in.)		Flow Q (cfs)	Snap-Tite® % of Flow
Size (in.)		Q (cfs)		Major	Minor	Major	Minor		
30	19	6.0	22	26	17	24.6	15.6	5.8	97%
38	24	11.1	28	33.5	21	31.7	19.2	10.6	95%
45	29	18.0	32	37	26	34.9	23.9	16.4	91%
53	34	27.7	40	46	31	43.6	28.4	27.6	100%
60	38	37.8	42	48.5	34	45.9	31.3	33.8	89%
68	43	52.7	48	55.5	39	52.3	35.9	48.3	92%
76	48	70.8	54	62	44.6	58.4	41.1	67.2	95%
83	53	91.0	54	60.2	47	56.6	43.5	70.0	77%
91	58	116.0	63	72.5	52	68.1	47.9	101.2	87%
98	63	143.1	63	67.5	58	63.5	53.9	109.1	76%

*flow is based on slope of 0.1%. HDPE n= 0.00914 / concrete n= 0.015

* Oval dimensions shown are the recommended pressed dimensions. Customers can pick any y-dimension between the equivalent round and the pressed dimension if full ovalization is not required. Call a Snap-Tite representative for project flow calculations as needed.

Table 4-3
Flow Comparison of Concrete Arch Pipe and Snap-Tite Liner

Concrete Arch Pipe					Equivalent Snap-Tite® Liner (in.)	Outside Liner Diameter (in.)		Inside Liner Diameter (in.)		Flow Q (cfs)	Snap-Tite® % of Flow
Nominal Size	Span (in.)	Rise (in.)	Q (cfs)			Major	Minor	Major	Minor		
29	18	28.5	18	5.2	22	26	17	24.6	15.6	5.8	111%
37	23	36.25	22.5	9.6	28	33.5	21	31.7	19.2	10.6	111%
44	27	43.75	26.625	15.4	32	37	26	34.9	23.9	16.4	106%
52	32	51.125	31.3125	23.5	36	41	30	38.7	27.7	23.0	98%
59	36	58.5	36	33.9	42	48.5	34	45.9	31.3	33.8	100%
65	40	65	40	45.6	48	55.5	39	52.3	35.9	48.3	106%
73	45	73	45	60.2	54	62	44.6	58.4	41.1	67.2	112%
88	54	88	54	100.4	63	72.5	52	68.1	47.9	101.2	101%
58	91	91	58	116.0	63	72.5	52	68.1	47.9	101.2	87%
102	62	102	62	146.8	63	67.5	58	63.5	53.9	109.1	74%

*flow is based on slope of 0.1%. HDPE n= 0.00914 / concrete n= 0.015